

Title: Post Graduate Researcher – Materials Science and Engineering
Department: Department of Energy
Agency: National Energy Technology Laboratory
Level: Post Graduate
Position Information: Temporary, 12 months full-time (40 hours per week)
Duty Location: Albany, Oregon
Who May Be Considered: United States Citizens & Foreign Nationals with appropriate approval

SUMMARY:

Through the Oak Ridge Institute for Science and Education (ORISE) this posting seeks motivated, post-graduates (PhD) interested in an Environmental-Materials focus area with specific expertise and interest in materials research at NETL that pertains to Materials Performance in supercritical carbon dioxide (sCO₂) environments. NETL is a multi-disciplinary, scientific and technical-oriented national laboratory. NETL's Office of Research and Development (ORD) conducts research to evaluate environmental impacts and risk assessments associated with domestic energy resource development. NETL is investigating sCO₂ cycles for fossil fuel power generation to increase efficiency, lower cost, and reduce environmental impact. The scope of the materials research is to evaluate whether the available power plant materials are suitable for fossil fuel sCO₂ service. Understanding the effect of sCO₂ environment on mechanical behavior (i.e., fatigue crack initiation and propagation) of materials through laboratory experimentation is essential in this evaluation.

In general applicants for this position should have expertise and/or familiarity in the physical and mechanical behavior of materials with experience in evaluating fatigue and fracture behavior of metallic materials.

KEY REQUIREMENTS:

- Applicants must be U.S. Citizens or approved Foreign Nationals
- Suitable for Federal employment, as determined by background investigation.
- Must hold PhD degree from an accredited institution in a field appropriate for the applicant's area of expertise.

HOW TO APPLY:

Applicants should apply through the Oak Ridge Institute for Science and Education (ORISE) program. The ORISE Program provides opportunities for undergraduate students, recent graduates, graduate students, postdoctoral researchers, and faculty researchers. NETL utilizes the ORISE program to support research within NETL's Office of Research & Development.

- Interested applicants should complete the online application at <http://orau.gov/netl/>
- In the online application list **Omer Dogan as your requested mentor**. This will associate your application with this job posting.
- If you have additional questions please contact Nancy Andres, Nancy.Andres@NETL.DOE.GOV, who is the NETL ORISE program contact.